Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
2011 SWFWMD Topographic Lidar: Hillsborough County

1.2. Summary description of the data:
SWFWMD regularly uses digital topographic information to support regulatory, land management and acquisition, planning, engineering and habitat restoration projects. LiDAR data will support hydrologic modeling activities associated with the Federal Emergency Management Agency (FEMA), and in the creation of Digital Flood Insurance Rate Maps(DFIRM). The LiDAR data will support the creation of Federal Emergency Management Agency Flood Insurance Rate Maps (FEMA FIRM) and an integrated ground and surface water model for Hillsborough County. The data were classified into 7 classifications; (1) unclassified, (2) ground, (6) buildings, (9) water, (11) wetlands (reclassed by OCM to 16), (12) overlap points, (23) reserved for ASPRS definition (reclassed by OCM to 15), (30) reserved for ASPRS definition, and (31) reserved for ASPRS definition (reclassed by OCM to 10). Cooner & Associates performed the vertical accuracy and horizontal accuracy QA/QC analysis.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2011-02-12, 2011-02-13

1.5. Actual or planned geographic coverage of the data:
W: -82.6709146548, E: -82.1894761429, N: 28.1711424563, S: 27.8961166606

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
las

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly

accessible

(describe or provide URL of description):

Process Steps:

- 2009-01-01 00:00:00 - All flights for the project were accomplished with two customized single-engine Cessna 206s' which provide an ideal, stable aerial base for LiDAR acquisition. This platform has relatively fast cruise speeds that are beneficial for project mobilization I demobilization while maintaining relatively slow stall speeds which can prove ideal for collection of a high-density, consistent data posting. Photo Science utilized two Optech Gemini scanners on this project (Serial Numbers 246 and 247). The systems are capable of collecting data at a maximum frequency of 167kHz, which affords elevation data collection of up to 167,000 points per second. The system utilizes a Multi-Pulse in the Air Option (MPIA). This sensor is also equipped with the ability to measure up to 4 returns per outgoing pulse from the laser and these come in the form of 151, 2nd, 3rd, and last returns. The intensity of the first three returns is also captured during the aerial acquisition. Optech DASHmap software was used in the post-processing of the airborne GPS and inertial data. This software suite includes the Applanix POSPac and Waypoint's GrafNav solutions. POSPac provides the smoothed best estimate of trajectory (SBET) that is necessary for Optech's post processor to develop the point cloud from the Lidar missions. The point cloud was created using Optech's Post Processor software. GeoCue's TerraScan was used in the creation of files needed in downstream processing, as well as in the tiling of the dataset into more manageable file sizes. The TerraScan and TerraModeler software packages are then used for the automated data classification, manual cleanup, and bare earth generation from this data. Project specific macros were used to classify the ground and to remove the side overlap between parallel flight lines. All data were manually reviewed and any remaining artifacts removed using TerraScan and TerraModeler. QT Modeler was used as a final check of the bare earth dataset. GeoCue was then used to create the deliverable LAS 1.2 files for both the All Point Cloud Data and the Bare Earth. In-house software was then used to perform final statistical analysis of the classes in the LAS files.
- 2014-09-24 00:00:00 - The NOAA Office for Coastal Management (CSC) received the topographic lidar files in LAS format from SWFWMD. The files contained lidar easting, northing, elevation, intensity, return number, etc. The data was received in Florida State Plane West 0902 (US ft) and NAVD88 (US ft). CSC performed the following processing for data storage and Digital Coast provisioning purposes: 1. The files were reviewed and erroneous elevations were removed. 2. Class 11 points (wetland) were reclassified to Class 16 (as needed) to fit CSC DAV class scheme. 3. Class 23 points (bridges) were reclassified to Class 15 (as needed) to fit CSC DAV class scheme. 4. Class 30 points (reserved for ASPRS definition) were reclassified to Class 10 (ground within 10 ft of a breakline) to fit CSC DAV class scheme. 5. Class 31 points (reserved for ASPRS definition) were reclassified to Class 12 (overlap) to fit CSC DAV class scheme.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/49699

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4698
https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/4698

7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4698;

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To

Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.